







# Bill of Materials

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Source Data From: KIT PIC16F887.PrjPcb  
 Project: KIT PIC16F887.PrjPcb  
 Variant: None

Creation Date: 12/09/2013 5:00:58 PM  
 Print Date: 41529 41529.70911

| Footprint             | Comment       | LibRef        | Designator  | Description   | Quantity |
|-----------------------|---------------|---------------|---|---|----------|
| PIN3V                 | PIN 3V        | PIN 3V        | BT1   | Battery 3VDC  | 1        |
| CP1.5/3.4             | 100uF/35V     | CP3           | C1, C2  | Cap 100uF/35V - 470uF/16V   | 2        |
| CN2                   | 104           | Ca2           | C3, C4, C5  | Cap np 104 => 105pF   | 3        |
| CP1/2                 | 10uF          | CP1           | C6, C7, C8, C9  | Cap P 0,1uF < 22uF , 16 - 50V   | 4        |
| DSB 9-F               | COM 9 FEMALE  | DSB9F         | COM1  | COM 9   | 1        |
| CN1                   | 33pF          | Ca            | Cx1, Cx2, Cx3, Cx4  | Cremic For Xtal 1pF => 100pF  | 4        |
| CAU 1AC               | Diode Brideg  | DB            | DB1   | Convert AC to DC voltage, 4 pin   | 1        |
| H                     | Dpy Blue-CA   | Dpy Blue-CA   | DS1, DS2, DS3, DS4  | 14.2 mm General Purpose Blue 7-Segme<br>Display: CA, RH DP, Gray Surface  | 4        |
| QTO-220N              | LM7805        | LM78xx        | IC1   | On ap +, from + 5 to + 24VDC  | 1        |
| HDR1X5                | Header 5      | Header 5      | ICSP1   | Header, 5-Pin   | 1        |
| IR2                   | IR1           | IR1           | IR1   | Receiver Infraed IC   | 1        |
| JACK DC 5MM           | JACK DC 5MM   | JACK DC 5MM   | J1  |   | 1        |
| USB B                 | USB B FEMALE  | USB B         | J2  |   | 1        |
| LCD 16x2              | LCD 16x2      | LCD 16x2      | LCD1  |   | 1        |
| HDR1X7                | Header 7      | Header 7      | LCD2  | Header, 7-Pin   | 1        |
| LED-3                 | LED           | LED           | LED1, LED2, LED3, LED4, LED5, LED6, LED7, LED8, LED9  | LED Single colour Green and Red   | 9        |
| HDR1X4                | Header 4      | Header 4      | P1, P2  | Header, 4-Pin   | 2        |
| HDR1X8                | Header 8      | Header 8      | P3, P5, Port B1, Port C1, Port D1   | Header, 8-Pin   | 5        |
| HDR1X3H               | Header 3H     | Header 3H     | P4  | Header, 3-Pin, Right Angle  | 1        |
| HDR1X2                | Header 2      | Header 2      | P6, P7, P8, P9, P10   | Header, 2-Pin   | 5        |
| HDR1X6                | Header 6      | Header 6      | Port A1   | Header, 6-Pin   | 1        |
| HDR1X3                | Header 3      | Header 3      | Port E1   | Header, 3-Pin   | 1        |
| QTO-92                | A1015         | A1015         | Q1, Q2, Q3, Q4  | PNP 600mW, ECB  | 4        |
| QTO-92                | C1815         | C1815         | Q5  | NPN 600mW, ECB  | 1        |
| R1/4W3                | 330R          | R             | R1, R2, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R21, R22, R23, R24, R25, R26, R27, R28, R29 |   | 24       |
| R1/4W4                | 10K           | R             | R3, R4, R5, R6  |   | 4        |
| R1/4W3                | 10K           | R             | R20   |   | 1        |
| R1/4W3                | 4k7           | R             | R30, R31, R32   |   | 3        |
| SPK                   | Speaker       | SPK           | SP1   | Speaker Chip  | 1        |
| SW4B                  | SW            | SW4-1         | SW1, SW2, SW3, SW4  | Switch button 4 pin   | 4        |
| BUTTON DIP            | SW            | BUTTON        | SW5   |   | 1        |
| QTO-92                | LM35          | LM35          | U1  | Teminal   | 1        |
| DIP40                 | PIC16F887-I/P | PIC16F887-I/P | U2  | Flash-Based, 8-Bit CMOS Microcontroller with nanoWatt Technology, 8K (x14-Bit words) Program Memory, 624 Bytes Data Memory, 35 I/O pins, 40-Pin PDIP, Stand VDD Range, Industrial Temperature | 1        |
| DIP16                 | MAX232        | MAX232        | U3  |   | 1        |
| DIP.100/8/W 300/L.400 | DS1307        | DS1307        | U4  | 64 X 8 Serial Real-Time Clock   | 1        |
| VR                    | 10K           | VR            | VR1, VR2  | Var Resistor  | 2        |
| XT32k                 | 32,768 Khz    | XT32k         | X1  | Crystal 32,768kHz for timer real  | 1        |
| CRYSTAL               | XTAL          | CRYSTAL       | XT1   |   | 1        |

102

| Approved | Notes |
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